

Amendments to Claims:

1. (Currently Amended) A method for reducing a pro-MSmultiple sclerosis immune response in a human individual, ~~wherein the having a pro-MS immune response comprises a humoral immune response induced against an epitope comprising terminal alpha 2,6 linked sialic acid on shed antigen released or produced from central nervous system tissue damage during an inflammatory disease process of multiple sclerosis, the method comprisingconsisting of~~ administering to the individual a composition consisting of an affinity ligand, or an affinity ligand and a pharmaceutically acceptable carrier; wherein the affinity ligand is a monoclonal antibody which is a humanized antibody, or chimeric~~murine~~ antibody, ~~or an antibody containing both murine antibody region and human antibody region~~; wherein the monoclonal antibody selectively binds to a determinant selected from the group consisting of human CD19, CD20, CD21, CD22, Lym-1, and CDIM; wherein the B cells targeted by the method and by the composition are selected from the group consisting of mature B cells, memory B cells, CD19<sup>+</sup>sTn<sup>+</sup> B cells, CD19<sup>+</sup>CD21<sup>+</sup>sTn<sup>+</sup> B cells, CD19<sup>+</sup>CD5<sup>+</sup>sTn<sup>+</sup> B cells, and a combination thereof; wherein the composition is administered in an amount effective to deplete the B cells; and wherein treatment of the individual with the composition results in reducing the pro-MSmultiple sclerosis immune response.

2-18. (Cancelled)

19. (Withdrawn) The method according to claim 1, wherein the composition consists of a chimeric anti-CD20 monoclonal antibody.

20. (Previously Presented) The method according to claim 1, wherein the composition is administered parenterally, or in a site directed method in which the composition is delivered into an access that directly supplies central nervous tissue undergoing demyelination.

21. (Cancelled)

22. (Previously Presented) The method according to claim 1, wherein the shed antigen comprises a glycolipid comprising one or more epitopes comprising terminal alpha 2,6 linked sialic acid.
23. (Previously Presented) The method according to claim 22, wherein glycolipid comprises a ganglioside.
24. (Cancelled)
25. (Withdrawn) The method according to claim 1, wherein the composition is administered intravenously.
26. (Currently Amended) A site-directed method for reducing a pro-MSmultiple sclerosis immune response in a human individual, ~~wherein the having a pro-MSmultiple sclerosis immune response is a humoral immune response induced of IgG antibody against an epitope comprising a terminal alpha 2,6 linked sialic acid on shed antigen released or produced from central nervous system tissue damage during an inflammatory disease process of multiple sclerosis, the method comprisingconsisting of~~ administering to the individual a composition consisting of an affinity ligand, or an affinity ligand and a pharmaceutically acceptable carrier; wherein the affinity ligand is a monoclonal antibody which is a humanized antibody, murine antibody, or ana chimeric antibody containing both murine antibody region and human antibody region; wherein the monoclonal antibody selectively binds to a determinant selected from the group consisting of human CD19, CD20, CD21, CD22, Lym-1, and CDIM; wherein B cells targeted by the method and by the composition are selected from the group consisting of mature B cells, memory B cells, CD19<sup>+</sup>sTn<sup>+</sup> B cells, CD19<sup>+</sup>CD21<sup>+</sup>sTn<sup>+</sup> B cells, and CD19<sup>+</sup>CD5<sup>+</sup>sTn<sup>+</sup> B cells, and a combination thereof; wherein the composition is delivered into an access that directly supplies central nervous tissue undergoing demyelination; wherein the composition is administered in an

amount effective to deplete the B cells; and wherein treatment of the individual with the composition results in reducing the pro-MSmultiple sclerosis immune response.

27. (Cancelled)

28. (Withdrawn) The method according to claim 26, wherein the composition consists of a chimeric anti-CD20 monoclonal antibody.

29. (Cancelled)

30. (Previously Presented) The method according to claim 26, wherein the shed antigen comprises a glycolipid comprising one or more epitopes comprising terminal alpha 2,6 linked sialic acid.

31. (Previously Presented) The method according to claim 30, wherein glycolipid comprises a ganglioside.

32. (Cancelled)

33. (Currently Amended) A method for reducing a pro-MSmultiple sclerosis immune response in a human individual, wherein the having a pro-MSmultiple sclerosis immune response directed against an epitope comprising terminal alpha 2,6 linked sialic acid contained on shed antigen comprising a glycolipid released or produced from central nervous system tissue damage during an inflammatory disease process of multiple sclerosis, the method comprisingconsisting of administering to the individual a composition consisting of a monoclonal antibody or a monoclonal antibody and a pharmaceutically acceptable carrier; wherein the monoclonal antibody that is a humanized antibody or a chimeric antibody; murine, or both human and murine, wherein the monoclonal antibody binds to a determinant selected from the group consisting of human CD19, CD20, CD21, CD22, Lym-1, and CDIM; wherein B

cells targeted by the method and by the composition are selected from the group consisting of mature B cells, memory B cells, CD19<sup>+</sup>sTn<sup>+</sup> B cells, CD19<sup>+</sup>CD21<sup>+</sup>sTn<sup>+</sup> B cells, and CD19<sup>+</sup>CD5<sup>+</sup>sTn<sup>+</sup> B cells, and a combination thereof; wherein the composition is administered in an amount effective to deplete the B cells; and wherein treatment of the individual with the composition results in reduction of the pro-MS immune response.

34. (Cancelled)

35. (Withdrawn) The method according to claim 33, wherein the monoclonal antibody consists of a chimeric anti-CD20 monoclonal antibody.

36. (Cancelled)

37. (Previously Presented) The method according to claim 33, wherein glycolipid comprises a ganglioside.

38. (Currently Amended) A method for treating inflammation associated with multiple sclerosis, the method comprising depleting B cells in an human individual by administering to the individual an amount of a single composition effective to deplete B cells and reduce a pro-MShumoral immune response against a shed antigen comprising an epitope comprising a terminal alpha 2,6 linked sialic acid; wherein the inflammation is caused by a humoral immune response against a shed antigen released or produced from central nervous system tissue damage during an inflammatory disease process of multiple sclerosis; wherein the composition consists of an affinity ligand, or an affinity ligand and a pharmaceutically acceptable carrier; wherein the affinity ligand consistsing of a monoclonal antibody that is a humanized antibody, or a chimeric antibodymurine, or both human and murine; wherein the monoclonal antibody binds to a determinant selected from the group consisting of human CD19, CD20, CD21, CD22, Lym-1, and CDIM; and wherein B cells targeted by the method and by the composition are selected from

the group consisting of mature B cells, memory B cells, CD19<sup>+</sup>sTn<sup>+</sup> B cells, CD19<sup>+</sup>CD21<sup>+</sup>sTn<sup>+</sup> B cells, and CD19<sup>+</sup>CD5<sup>+</sup>sTn<sup>+</sup> B cells, or a combination thereof.

39. (Cancelled)

40. (Withdrawn) The method according to claim 38, wherein the composition consists of a chimeric anti-CD20 monoclonal antibody.

41. (Cancelled)

42. (Cancelled)

43. (Previously Presented) The method according to claim 38, wherein the shed antigen comprises a glycolipid comprising one or more epitopes comprising terminal alpha 2,6 linked sialic acid.

44. (Previously Presented) The method according to claim 43, wherein glycolipid comprises a ganglioside.

45. (Currently Amended) A method for reducing a pro-MS~~multiple~~-sclerosis-immune response consisting of~~comprising~~ administering to a human individual an affinity ligand consisting of a monoclonal antibody, or a monoclonal antibody and a pharmaceutically acceptable carrier; wherein the monoclonal antibody that is a humanized antibody, or a chimeric antibody murine, or both human and murine;, wherein the monoclonal antibody selectively binds to a determinant selected from the group consisting of human CD19, CD20, CD21, CD22, Lym-1, and CDIM on a subpopulation of B cells selected from the group consisting of mature B cells, memory B cells, CD19<sup>+</sup>sTn<sup>+</sup> B cells, CD19<sup>+</sup>CD21<sup>+</sup>sTn<sup>+</sup> B cells, and CD19<sup>+</sup>CD5<sup>+</sup>sTn<sup>+</sup> B

cells, or a combination thereof, and wherein the affinity ligand is administered in an amount effective to deplete said B cells.

46. (Cancelled)

47. (Cancelled)

48. (Previously Presented) The method according to claim 45, wherein the B cells have been activated by shed antigen comprising terminal alpha 2, 6 linked sialic acid.